



NWS Des Moines

Cover Photo Credit:

On Sept. 24 strong thunderstorms moved across northern Iowa, causing extensive straight-line wind damage to Swea City, IA. Damage to trees and small structures was reported across the area, including collapsing an empty grain bin (far right in image). Imagery provided courtesy of Kassuth County Emergency Manager.

The Weather Whisper

Hydrology Partners - Receive Reports of Water Conditions

Andrew Ansorge, Meteorologist

After the end of each month, the hydrology team at your local National Weather Service office composes two reports of hydrologic conditions for their area of responsibility. For the Des Moines office, this includes 51 counties across central Iowa.

The first is a report of any river forecast point that rose above flood stage, which is formally titled the "Flood Stage Report". This includes the time the river rose above and fell below flood stage and the river crest value and time. The second is a report of weather and water conditions across the area, which is formally titled the "Monthly Report of Hydrologic Conditions". This report discusses monthly trends of temperature and precipitation, recent drought conditions if any, recent wetness or dryness of soil moisture, above or below normal river basin streamflow, and monthly reservoir minimum and maximum height and storage capacity of Saylorville Lake and Lake Red Rock.

The length of both reports, but especially the "Monthly Report of Hydrologic Conditions" can vary from month to month. Not surprising, the length of the reports depends on whether or not there is flooding in a given month. For example, when significant river flooding from ice jams, snow melt, and heavy rainfall occurred in March 2019, additional discussion and pictures of the flooding were included resulting in the report being 17 pages. However, the length of the August 2019 report when no flooding occurred was just 4 pages.

Both reports are typically completed by around the 15th of the following month. If you are a local or state government agency or water resource manager and have an interest in receiving these reports monthly, please send an email to w-dmx.webmaster@noaa.gov and include that you would like to receive the monthly hydrology reports.

Ice jams continued to spread to the Iowa River in Tama County (Photo 13) and up into Fort Dodge and Lehigh on the Des Moines River (Photo 14-15).



Photo 13: Ice jam flooding on Meskwaki Tribal Land near Tama from the Iowa River on March 14, 2019. Photo courtesy of Tama County Emergency Management.



Photo 14: Ice jam on the Des Moines River near Nelson Avenue and P59 on March 14, 2019. Photo courtesy of Webster County Emergency Management.

An example from the "Monthly Report of Hydrologic Conditions" from March 2019. Click on image for the full report.

Cooperative Observer Honored for 25 Years of Service

Brad Fillbach, Observation Program Leader

Mark Hoover (right) of Eldora, Iowa recently received his 25 year Length of Service award. Brad Fillbach (left), OPL, WFO Des Moines presented Mark with his award. As observers, Eugene and Nicky send in daily temperature and precipitation measurements, valuable in forecast verification and understanding the local climate.



So You Want to be a Meteorologist?

Brooke Hagenhoff, Meteorologist

NWS Des Moines recently hosted the third graders of Rolling Green Elementary School in Urbandale. During their visit students got a behind-the-scenes look at how forecasts are made and how warnings are issued during severe weather events. Students explored how tornadoes are formed using a tornado simulator and were able to see a replica of the largest hailstone on record. Concepts such as the water cycle, typical of a third grade curriculum, may be seen as rather simple, it is the catalyst for all weather types and students were excited to learn that the things they are learning now are things meteorologists use every day! NWS meteorologists also walked students through a typical “Day-in-the-Life” of an NWS meteorologist including taking observations at the office, issuing forecasts and warnings, conducting research and outreach with partners, and balancing rotating shift work.



Above: Meteorologist Roger Vachalek describes the forecast process on the operations floor.

Left: Meteorologist Brooke Hagenhoff shows students how the water cycle is responsible for every type of weather that we see.

Summer Climate Summary

	<i>Average Temp</i>	<i>Departure from Normal</i>	<i>Rank</i>	<i>Total Precipitation</i>	<i>Departure from Normal</i>	<i>Rank</i>
June	69.3°F	-0.4°F	64th Coldest (tied w/1910)	3.86"	-1.16"	55th Driest (tied w/1958)
July	75.1°F	+1.5°F	51st Warmest (tied w/1973)	3.35"	-1.15"	63rd Driest
August	69.8°F	-1.7°F	31st Coldest (tied w/1908)	3.55"	-0.65"	74th Driest (tied w/1899)
3-Month Average	71.4°F	-0.20°	55th Coldest Summer	10.81"	-2.90"	40th Wettest Summer

Based on 147 years of statewide climate records.

[Data courtesy of Iowa Department of Agriculture & Land Stewardship](#)



Weather.gov/desmoines

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